The Sharing of Affect: Pathways, Processes, and Performance

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CHAPTER 4

The Role of Sharing Positive and Negative Affect in Explaining the Conflict-Performance Link: Harvesting Benefits and Harnessing Detriments of Intragroup Conflict

Abstract

The Role of Sharing Positive and Negative Affect in Explaining the Conflict-Performance Link: Harvesting Benefits and Harnessing Detriments of Intragroup Conflict[*#]

The present study focuses on valence of affect and affective sharing as moderators of the link between task and relationship conflict on the one hand and cognitive performance on the other hand. We integrate research on (group) affect and conflict and argue that positive and negative affective sharing may bring out the potential benefits and/or mitigates the potential detriments of conflict. The results from a laboratory experiment (Study 1, *N* = 182), and an organizational survey of work groups (Study 2, *N* = 70) provided evidence for this notion by showing that task conflict has more beneficial effects on performance when group members share positive affect as compared to negative affect, whereas relationship conflict has less detrimental effects on performance when group members share negative affect as compared to positive affect. Theoretical contributions focus on the role of affect in conflict situations and managerial ramifications of the findings are discussed.

[*] Chapter based on Klep, A. H. M., Wisse, B. M., & Van der Flier, H. (2010). The role of sharing positive and negative affect in explaining the conflict-performance link: Harvesting benefits and harnessing detriments of intragroup conflict. *Manuscript under review*.

[#] Best Paper Award 2009 of the annual WAOP Conference

Whether you quarrel with colleagues about group targets, disagree with your supervisor on how to accomplish a certain goal, or experience everyday interpersonal friction within your work group, conflict seems to be an inevitable aspect of life in organizational work groups. Conflict, or the process that results from the tension between team members because of perceived differences in interests, views or goals (De Dreu & Weingart, 2003; Kolb & Putnam, 1992), may concern task issues or relationship issues (e.g., Cosier & Rose, 1977; De Dreu, 2006; Guetzkow & Gyr, 1954; Janssen, Van de Vliert, & Veenstra, 1999; Jehn, 1995; Jehn, Northcraft, & Neale, 1999). Although by and large both task conflict as well as relationship conflict seem to have detrimental effects on work group performance and functioning (De Dreu & Weingart, 2003), some studies reveal positive effects of conflict in work groups (Jehn, 1997; Schweiger, Sandberg, & Rechner, 1989). Given the ubiquitous nature of disputes and tension, it is of key importance to discover the circumstances that may mitigate the detrimental effects of conflict on work group functioning and bring out its constructive potential.

Previous research so far identified several moderators of the conflict-performance link (e.g., Jehn, 1995; Simons & Peterson, 2000), but remarkably it largely neglected the potential role of affect and the sharing of affect between group members. The present study focuses on the sharing of positive and negative affect between group members as potential moderators in the conflict-cognitive performance relationship. We contend that the sharing of negative affect may mitigate the detrimental effects that relationship conflict may have on cognitive performance. In contrast, we expect the sharing of positive affect to expose the potential beneficial effects of task conflict on cognitive performance. As we will explain, we base our hypotheses on combined theory on the role of sharing of affect in work groups, the informational value of affect, and conflict management strategies and conflict norms.

The aim of the present study is threefold. First, it aims to add to the debate about conditions that may alleviate the harmful effects of conflict on work group functioning and/or put its beneficial effects to the fore. Second, we assert that a more thorough understanding of the role of affect may augment to our insight in the effects of relationship and task conflict on performance. Indeed, we also hope that the present paper may draw more general attention to the role of affect in conflict situations, because we believe, and aim to show, that the field may benefit from it. Last, in contrast to the bulk of correlational studies on relationship and task conflict, the present study aims to come to more robust conclusions about investigated relationships between relationship and task conflict, valence of affect, affective sharing, and cognitive performance by employing field research as well as experimental research.

The Effects of Relationship and Task Conflict on Work Group Functioning

Work groups face several distinct complexities, such as the relatively common occurrence of conflict. Building on earlier research, Jehn (1995) focused on the differentiation between task conflict and relationship conflict and their differential effects on work group functioning. Relationship conflict is characterized by interpersonal incompatibilities between group members, including interpersonal friction, personality clashes, and interpersonal problems, whereas task conflicts are disagreements among group members about the content of the task, including differences in viewpoints, ideas, and opinions (Jehn, 1995).

In general, relationship conflict has been associated with negative group outcomes. Ample theoretical rationales have been put forward to justify the detrimental effects of relationship conflict. Theorists have argued that relationship conflict decreases goodwill and mutual understanding (Deutsch, 1969), inhibits group members to enjoy each other and their work (Jehn, 1995), reduces receptivity to ideas of other group members (Pelled, 1996), limits cognitive processing (Pelled, 1996), reduces the ability to process complex information (Staw, Sandelands, & Dutton, 1981), and increases misspent time and effort to resolve personal conflicts instead of working on the task at hand (Pelled, 1996). In line with this reasoning, empirical studies on relationship conflict show that work groups suffer of loss of productivity, effective communication, cooperation and satisfaction (Baron, 1991; Evan, 1965; Jehn, 1994, 1995, 1997).

In contrast, theoretical analyses suggest beneficial effects of task conflict, which is proposed to increase critical evaluation (Janis, 1972), divergent cognitive processing (Nemeth, 1995), the number of ideas and opinions (Jehn, 1995), and understanding of the task at hand (Amason & Schweiger, 1994). Some empirical studies indeed find positive effects of (moderate) task conflict on performance (e.g., De Dreu, 2006; Jehn, 1994, 1995; Jehn & Chatman, 2000). However, a recent meta-analysis of empirical studies shows that overall task conflict is negatively associated with team functioning (De Dreu & Weingart, 2003). Based on their results, De Dreu and Weingart arrive at the more skeptical conclusion that team performance may only benefit from task conflict under specific circumstances.

Based on the above research the obvious question is which circumstances may bring out the potential positive effects of task conflict or mitigate the detrimental effects of relationship conflict on work group functioning. Earlier studies that investigated potential moderators of the conflict-performance link focused on variables such as task type, task interdependence, and group diversity (for a review, see Jehn & Bendersky, 2003). So far, only few studies considered the role of affective processes in explaining the differential effects of conflict on performance (Ayoko, Callan, & Härtel, 2008; Jehn, 1997). However, as affect has

been shown to influence an individual's perception or interpretation of the environment and situational contexts (e.g., Forgas, 1995; Forgas & George, 2001) it stands to reason that affect may also influence the interpretation of the conflict situation. Moreover, earlier studies did not consider that affect, just like conflict, may operate as a social process between group members. That is, affect may be shared among team members, and this sharing of negative and positive affect may play a prominent role in the conflict-performance link. In the below, we will delineate our rationale for the role of both positive and negative affective sharing in explaining the relationship between task and relationship conflict on the one hand and cognitive task performance on the other.

The Role of Affective Sharing in Conflict

Group members may engage in several affective sharing mechanisms. First, *affective contagion* refers to the process in which moods or emotions of other people around us influence our own affective state (Kelly, 2004). Indeed, people tend to automatically mimic and synchronize affective expressions of others, and consequently become more emotionally similar (Hatfield, Cacioppo, & Rapson, 1994). Second, via *affective comparison* processes people assess the appropriateness of their experienced feelings by comparing them to those of others and, if incongruity is detected, adjust their own feelings accordingly (cf., Festinger, 1954). Third, people share their affect through the process of *conscious social sharing of affect* which is defined as the open communication between people about emotional circumstances and their related feelings and reactions (Rimé, 1995). Affective sharing processes may lead to affective convergence and consequently to the development of a group affective state (e.g., Barsade, 2002; Bartel & Saavedra, 2000; George, 1990; Sy, Côté, & Saavedra, 2005).

We propose that sharing mechanisms like affective contagion, affective comparison and conscious affective social sharing may be perceived as *social verification processes* that validate affective experiences (cf., Hardin & Higgins, 1996; Schachter, 1959). The shared affective reality that is obtained as a consequence may render group members' affective states to more strongly affect subsequent behavior, because it is considered to have higher informational value. Evidence for this notion comes from Klep, Wisse, and Van der Flier (2009, in press) who found that shared affect in work groups had stronger effects on behavior than affect that is not shared.

Although affect that is shared may have stronger effects on behavior in general, the particular effects that it may have are dependent on the valence of the affect that is shared. As research on affect at the individual level shows, positive affective states tend to produce more spontaneous and risky behavior, whereas negative affective states engender more careful and cautious behavior (Bless, 2000; Forgas, 1995; Schwarz & Clore, 1988). An

explanation for these findings comes from the mood-as-information-hypothesis (Schwarz & Bless, 1991), which states that our mood may inform us about the benign or problematic nature of the current situation. Positive mood signals a safe and satisfactory (task) environment which leads individuals to feel relatively unconstrained and to take risks. In contrast, negative mood suggests a problematic (task) environment, resulting in a careful assessment of the environment and enhanced risk aversion (Schwarz & Bless, 1991). Indeed, people in positive moods are found to be more prone to rely on stereotypes (Bodenhausen, 1993; Forgas, 1998a) and to engage in optimistic biases and wishful thinking (Alloy & Abramson, 1979). For instance, in a study on mood influence on verbal communication, Forgas (1999) found that happy people use more direct and less polite request strategies, whereas sad persons use a more cautious, indirect, and polite requesting strategy. Likewise, negotiation literature shows that when people are in a good mood they show a general positivity bias in bargaining encounters, such as having more favorable expectations about the task and the opposition, which leads them to engage in more cooperative and less competitive bargaining strategies (Forgas, 1998b).

In line with this reasoning, research on intragroup conflict has found that positive emotions associated with friendship allows team members to interpret the (conflict) situation as a non-threatening environment, which elicits more risk-taking behaviors, such as open communication and the use of open conflict norms (Shah & Jehn, 1993). In a similar vein, negative affect may lead group members to interpret the (conflict) situation as a problematic state of affairs, which may engender cautious behavior, such as avoiding conflict and the use of disencouraging conflict norms. Evidence for this notion comes from a study of Desivilya and Yagil (2005) on the effects of emotional states on conflict management styles in work groups. They found that positive emotions were positively related to a preference for cooperative patterns of conflict management, whereas negative emotions were associated with an avoidance pattern of conflict management. These results provide evidence for the idea that emotional states are closely linked to conflict management strategies.

Conflict management strategies and the use of conflict norms have been found to influence the effects of relationship en task conflict on performance. For instance, literature on conflict management showed that task conflict is positively related to group performance when conflict is actively (openly discussing differences of opinion) managed and negatively related to group performance when conflict is passively (avoiding open discussion of differences of opinion) managed (DeChurch & Marks, 2001). Similarly, literature on conflict norms has suggested that open conflict norms encourage open confrontation and expression of disagreements, hence exposing the potential positive effects of task conflict (Jehn, 1995, 1997). Corroborating this line of reasoning, Ayoko et al. (2008) found that the existence of

open conflict management norms may mitigate the potential negative effects of task conflict on destructive reactions to conflict. In contrast, disencouraging norms, which hold that conflict should be avoided at any cost, have been found to mitigate the negative effects of relationship conflict. For instance, Jehn (1997) found that high-performing work groups had group norms that promoted discussion of task issues, yet simultaneously had norms that were not accepting of open conflict about relationship issues. Similarly, Jehn (1995) found that groups with relationship conflict and conflict avoidance norms had higher satisfaction and liking levels than groups engaged in relationship conflict that held open conflict norms. Moreover, a field study on managing relationship conflict in organizational teams showed a positive association between avoiding responses to relationship conflict on the one hand and team functioning and overall team effectiveness on the other (De Dreu & Van Vianen, 2001).

We integrate the above literature on affect and conflict, and reason that sharing of *positive* affect in work groups may engender risk-taking behaviors, such as being open about conflict, using encouraging conflict norms, and employing collaborating conflict strategies. As such, positive group affect may bring about the potential beneficial effects of task conflict, however, it may also strengthen the detrimental effects of relationship conflict. In contrast, we argue that sharing *negative* affect in work groups may engender cautious behavior, such as avoiding conflict through the use of disencouraging conflict norms and avoidance conflict strategies. In this way, negative group affect serves the function of mitigating the detrimental effects of relationship conflict, but also hinders the potential beneficial effects of task conflict to be exposed. More specifically we predict that:

> *Hypothesis 1:* Task conflict will lead to higher performance on a cognitive task when group members share positive affect than when they share negative affect (as potential beneficial effects of task conflict will be exposed through openness to conflict).
>
> *Hypothesis 2:* Relationship conflict will lead to higher performance on a cognitive task when group members share negative affect than when they share positive affect (as detrimental effects of relationship conflict will be mitigated through conflict avoidance).

To investigate our hypotheses we employed two studies. First, we conducted an experimental study (Study 1, N = 182) using a 2 (conflict: task vs. relationship) by 2 (affect: positive vs. negative) by 2 (affective sharing: yes vs. no) between-subjects design. Cognitive performance was measured using a decision making task. Second, we conducted a cross-sectional survey of 70 work groups in which we focused particularly on relationship conflict.

Study 1

Method

Design and participants. Participants were 182 Dutch university students (M_{age} = 20.2, *SD* = 3.27, 32.4% male) who participated voluntarily. Participants were randomly assigned to the conditions of a 2 (conflict: task vs. relationship) by 2 (affect: positive vs. negative) by 2 (affective sharing: yes vs. no) between-subjects design.

Procedure. Upon arrival in the laboratory, participants were told that they would partake in a study on decision making in groups. Participants were led to believe they formed a work group with two other students with whom they were able to communicate via the computer network. Next, they were placed in separate cubicles containing a desk, chair and computer. We made sure we strengthened the idea that participants formed an interconnected group of three people, for instance by giving regular instructions to wait for a sign so that all group members would start study-sections simultaneously. Also, each participant was assigned an anonymous group member letter (all participants received the letter 'C'; letter 'A' and 'B' were used to personalize the bogus group members).

The first part of the study was introduced to participants as an independent study on people's experiences with and reactions to television and movie fragments. In reality, participants were presented with our affect manipulation. In the *positive affect condition* participants watched two 5-minute long film fragments containing edited highlights from two popular animation movies; *Finding Nemo* and *Shrek 2*. In the *negative affect condition* participants were shown two 5-minute long film fragments containing tragic war scenes from respectively *The sky is falling* and *Sophie's choice*. Research has shown that film clips are a highly effective method to manipulate participants' mood (for a review see Gerrards-Hesse, Spies, & Hesse, 1994). Thereafter, participants were asked to provide information about how they felt when watching the fragments. Participants' affective information consisted of (a) a short description of their experienced feelings, (b) an emotion icon that best represented their feelings, and (c) responses to a series of items assessing their affective states.

Next, participants in the *affective sharing condition* were told that each group member's affective information (the short description and the chosen emotion icon), would be mutually exchanged among group members via the computer network. In reality, participants were presented with bogus positive or negative (depending on the affect condition) affective information from their supposed group members, and were asked to study the information carefully. Then, participants took 5 minutes to write a collective

description of experienced feelings based on their own affective experience and on the affective experiences of their group members. Note that in the affective sharing condition participants are aware of their group members' feelings through the allegedly verbal (short description) and non-verbal (emotion icon) sharing of affect. Hence, affective sharing processes such as affective contagion, affective comparison, and social sharing of affect are facilitated.

In the *affective non-sharing condition* participants also received affective information, however, this information consisted of the short description and emotion icon they had provided themselves. Participants were also asked to study the affective information carefully and to think back of the feelings they had experienced during the film fragments. Then, participants took 5 minutes to write a personal description of their experienced feelings during the film fragments. Note that participants in the affective non-sharing condition are not aware of their group members' feelings because of a lack of sharing of affect. Hence, affective sharing processes such as affective contagion, affective comparison, and social sharing of affect are inhibited.

The second part of the study was then introduced to participants as the study on group decision making. Participants were instructed to work together as a team on a survival task. The task presented was a decision making task resembling the NASA Moon Survival Exercise, yet this task contains a Winter Survival Problem (Johnson & Johnson, 2000). Participants read a scenario describing a plane crash in a very cold and desolated area, in which both the pilot and co-pilot died and the passengers survived. Participants read that the passengers managed to salvage 12 items from the plane, and that it was their task to rank the 12 items according to their importance to survive in the described situation.

Participants were then instructed to communicate with their supposed group members about how to handle the severe situation. Each group member was given one opportunity to send an e-mail containing his or her input on the exercise. The instructions on the screen read that e-mails could be sent in turn, starting with group member 'A', then 'B' and then 'C'. Next, all participants received an e-mail of group member 'A', proclaiming the opinion that there were two options on how they as a team should handle the situation; finding their way to a nearby town or pitching a camp. The e-mail read that the decision to choose one out of these two options was arbitrary. The e-mail ended with the sentences: "You do agree with me, I suppose? I am sure I am right!" Note that the e-mail is neutral in content on the solution of the task (leaving all options open for the ultimate ranking), and is an easy target for conflict on both relationship related and task related issues. Subsequently, participants received an e-mail of team member 'B', representing our conflict manipulation.

In the *task conflict condition* participants were led to believe that there was a conflict in the team about how to perform the task. Participants received the input of team member 'B' via an e-mail that read: "This isn't the right way we should resolve this task. It is too simple!" The e-mail ended with the sentence: "In short, I do not agree with your approach regarding this task". Note that in the task conflict condition, conflict is concerned with task issues, reflecting different viewpoints, ideas, and opinions regarding the content of the task. In contrast, participants in the *relationship conflict condition* were led to believe that there was a conflict in the team about values and interpersonal style. In this condition, the e-mail of team member 'B' read: "This isn't the right way you should communicate with your group members. It is too arrogant!", and ended with the sentence: "In short, I do not agree with your attitude". Note that in the relationship conflict condition, conflict is concerned with relationship issues, reflecting personal friction and personality clashes in the team.

Next, participants were shortly presented with 12 items (e.g., a ball of steel wool, a small axe, a compass) that were salvaged from the plane, after which it was their turn to send an e-mail to their fellow group members regarding how to handle the situation. Subsequently, they were again presented with the 12 items and instructed to rank the items in order of their importance for survival within a time frame of 5 minutes. At the end of the task participants were carefully debriefed, thanked, and paid.

Dependent Measures

Manipulation checks. All responses to the manipulation checks were assessed on 7-point scales (1 = *completely disagree*, 7 = *completely agree*).

To check the successfulness of the affect manipulation we used participants' responses to the series of affect items we developed based on circumplex models of affect (Larsen & Diener, 1992) and that were presented after the mood induction. We measured positive affect using nine items (Cronbach's α = .95, *M* = 4.23, *SD* = 1.55). Example items are 'I feel happy', and 'I feel cheerful'. We measured negative affect also with nine items (Cronbach's α = .87, *M* = 2.90, *SD* = 1.18). Example items are 'I feel sad' and 'I feel nervous'.

As a check on our affective sharing manipulation we measured affective sharing with nine items (Cronbach's α = .94, *M* = 3.50, *SD* = 1.71). We used items of the affective sharing scale of Klep et al. (in press) which reflects affective contagion, affective comparison, and social sharing of affect. Items included: 'I share my feelings with these team members' and 'My experienced affect is highly similar to the experienced affect of my group members'.

To assess whether the conflict manipulation was successful we measured task conflict using three items based on Jehn's (1995) intragroup conflict scale (e.g., 'The other team members disagree about opinions regarding the task being done', Cronbach's α = .79,

M = 5.15, *SD* = 1.38). As a check on relationship conflict we assessed relationship conflict using three items based on Jehn (1995) and tailored to the specific setting of this study (e.g., 'The other team members are in conflict regarding interpersonal attitudes', Cronbach's α = .94, *M* = 4.58, *SD* = 2.04).

Cognitive performance: decision making. A measure of cognitive performance was obtained by assessing participants' decision making qualities regarding the Winter Survival Problem (Johnson & Johnson, 2000). For each of the 12 items we calculated the absolute difference between participants' ranking numbers and the expert's ranking number as described by Johnson and Johnson (2000). We obtained a sum score of differences for each participant by adding up the absolute differences in ranking numbers for each item. Note that low sum scores represent small differences between the participant's ranking and the expert's ranking and thus indicate a high level of cognitive performance. Similarly, high sum scores reflect a great deviance from the experts ranking representing a low level of cognitive performance.

Results

Manipulation checks. In all analyses of variance (ANOVAs), conflict, affect, and affective sharing, were factors in the design.

An ANOVA on the positive affect score showed that participants in the positive affect condition experienced more positive affect (*M* = 5.40, *SD* = 0.81) than participants in the negative affect condition (*M* = 3.00, *SD* = 1.14), $F(1, 174) = 268.72$, $p < .001$, $\eta^2 = .61$. Similarly, the ANOVA on the negative affect score indicated that participants in the negative affect condition experienced more negative affect (*M* = 3.70, *SD* = 1.00) than participants in the positive affect condition (*M* = 2.12, *SD* = 0.76), $F(1, 174) = 149.00$, $p < .001$, $\eta^2 = .46$.

An ANOVA on the scale of affective sharing revealed that participants in the affective sharing condition reported to have shared their feelings with the other team members to a greater extent (*M* = 4.96, *SD* = 0.74) than participants in the affective non-sharing condition (*M* = 2.07, *SD* = 1.04), $F(1, 174) = 463.83$, $p < .001$, $\eta^2 = .73$.

An ANOVA on the task conflict scale revealed that participants in the task conflict condition experienced more task related conflict (*M* = 5.64, *SD* = 0.95) than participants in the relationship conflict condition (*M* = 4.66, *SD* = 1.56), $F(1, 174) = 25.32$, $p < .001$, $\eta^2 = .13$. Finally, an ANOVA on the relationship conflict score indicated that participants in the relationship conflict condition experienced more personality related conflict (*M* = 6.28,

SD = 0.79) than participants in the task conflict condition (*M* = 2.84, *SD* = 1.35), $F(1, 174) = 445.32$, $p < .001$, $\eta^2 = .72$.

In all ANOVAs no other effects but the ones reported were found. Hence, we conclude that our manipulations were successful.

Cognitive Performance: Decision Making

A 2 (conflict) by 2 (affect) by 2 (affective sharing) ANOVA was performed on the sum score of differences between participants' rankings and the expert's ranking. We did not find any main effects, however, we did find a Conflict × Affect interaction, $F(1, 174) = 4.69$, $p < .05$, $\eta^2 = .03$. Participants in the relationship conflict condition had a higher cognitive performance (smaller difference score) when experiencing negative affect (*M* = 50.96, *SD* = 7.51) than when experiencing positive affect (*M* = 54.80, *SD* = 6.63), $F(1, 180) = 6.44$, $p < .05$, $\eta^2 = .04$, whereas for participants in the task conflict condition no difference in cognitive performance between positive affect (*M* = 53.44, *SD* = 7.83) and negative affect (*M* = 54.21, *SD* = 7.33) was found, $F(1, 180) < 1$, *ns*.

This interaction effect was qualified by the hypothesized Conflict × Affect × Affective Sharing interaction, $F(1, 174) = 4.93$, $p < .05$, $\eta^2 = .03$. Decomposing this interaction using simple interaction effects analyses showed a significant 2-way interaction between conflict and affect in the affective sharing condition, $F(1, 180) = 9.76$, $p < .01$, $\eta^2 = .05$ (see Figure 4.1, top panel). However, the interaction between conflict and affect was not significant in the affective non-sharing condition, $F(1, 180) < 1$, *ns*, $\eta^2 = .00$ (see Figure 4.1, bottom panel). Conform our first hypothesis, we found that participants in the task conflict condition performed better on the cognitive task (smaller difference score) when they experienced positive affective states (*M* = 50.71, *SD* = 7.57) than when they experienced negative affective states (*M* = 55.76, *SD* = 5.74) in the affective sharing condition, $F(1, 180) = 3.55$, $p = .06$, $\eta^2 = .02$. When participants were in the task conflict condition no difference between positive affect (*M* = 56.17, *SD* = 7.25) and negative affect (*M* = 53.67, *SD* = 8.75) was found in the affective non-sharing condition, $F(1, 180) = 1.52$, $p = .22$, $\eta^2 = .01$. Moreover, as was expected in our second hypothesis we found that participants in the relationship conflict condition performed better on the cognitive task (smaller difference score) when experiencing negative affect (*M* = 50.09, *SD* = 8.19) than when experiencing positive affect (*M* = 55.46, *SD* = 5.53) in the affective sharing condition, $F(1, 180) = 6.13$, $p < .05$, $\eta^2 = .03$. Additionally, for participants who were in the relationship conflict condition no difference between positive affect (*M* = 54.17, *SD* = 7.60) and negative affect

(M = 51.79, SD = 6.62) was found in the affective non-sharing condition, $F(1, 180) = 1.23$, $p = .27$, $\eta^2 = .01$.

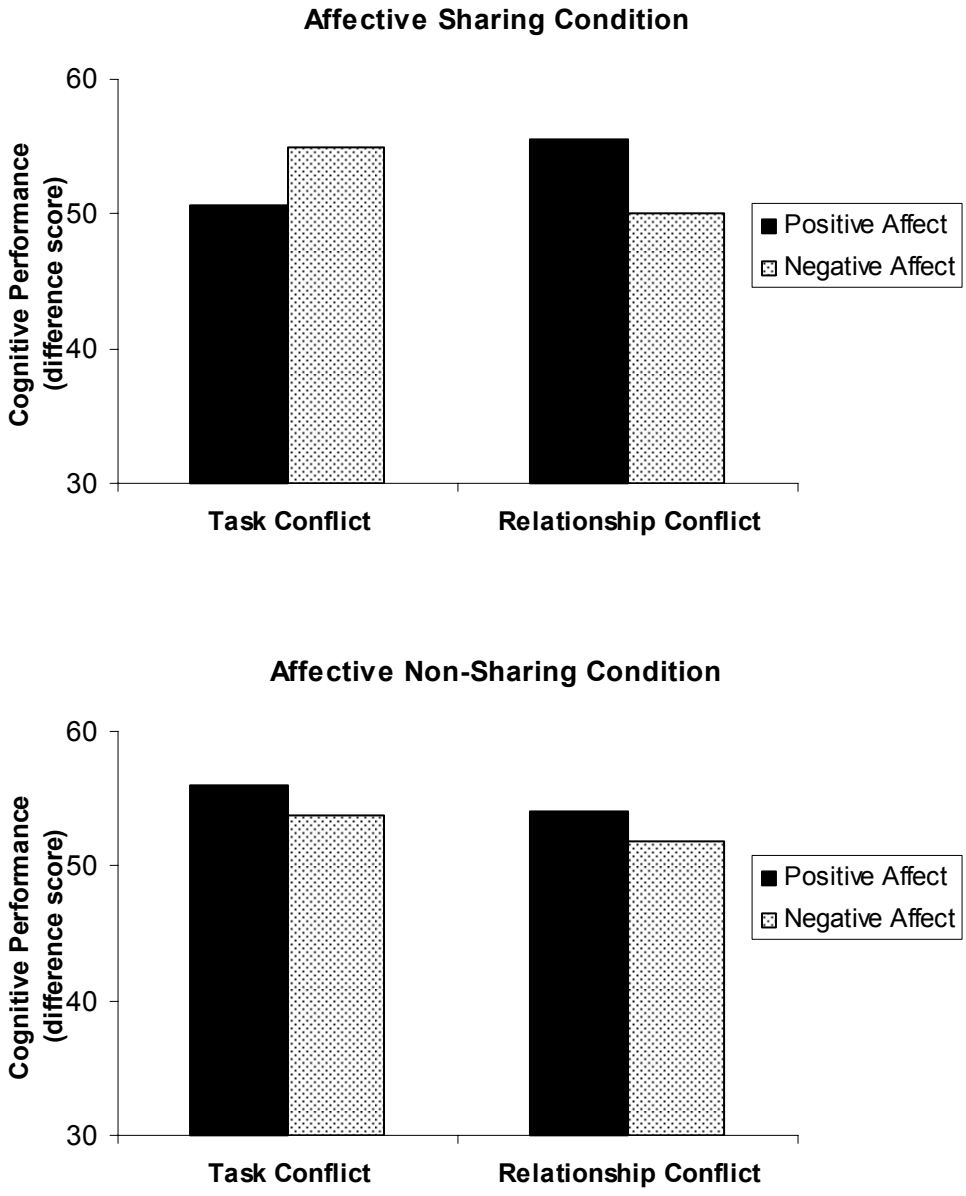

Figure 4.1. Effects of three-way interaction of conflict by affect by affective sharing on cognitive performance (decision making) for Study 1. Higher difference scores reflect lower cognitive performance and vice versa.

Discussion

The results of Study 1 provide first evidence for the hypothesis that task conflict will lead to a higher cognitive performance when work groups share positive (as compared to negative) feelings. Moreover, we found the expected opposite pattern for relationship

conflict, such that relationship conflict leads to a higher cognitive performance when work groups share negative (as compared to positive) affect. It is important to note here that Study 1 shows that affect had the expected influence on the relationship between conflict and performance only in the affective sharing condition and not in the affective non-sharing condition. These results thus corroborate the notion that affect that is shared has stronger effects on behavior than affect that is not shared, which is in line with previous research (Klep et al., 2009, in press). All in all, Study 1 indicates that the affective group context may determine the extent to which task and relationship conflict has detrimental and/or beneficial effects on cognitive performance.

Answering to the call made by de Dreu and Weingart (2003) we used an experimental set-up in which we manipulated types of conflict within a controlled setting. This not only enabled us to draw conclusions about causality, but it also provided us the opportunity to refrain from self-report measures of performance and to obtain objective measures of performance instead. However, this first study does not allow us to determine whether the proposed relationships genuinely occur in organizational settings, and we therefore opted for conducting a second study, namely a field study. We decided to focus the field study particularly on relationship conflict for two reasons. First, although participants may be deeply immersed in a laboratory task which facilitated the manipulation of task conflict, it may have been more difficult to simulate the often ongoing and multi-facetted character of relationship conflict. In reality, personal conflicts may more deeply infringe on human behavior and attitudes than in a laboratory context. Second, we reasoned that avoiding conflict (as a consequence of negative affective sharing) may have been less difficult for participants in a short-lived laboratory study than it would be for employees in *real* work groups who may experience ongoing personality clashes in their daily work life. Therefore, we deem that a more robust test of particularly the effects of relationship conflict is needed. Consistency of results between the studies may bolster our confidence in the results.

Similar to Study 1, we hypothesized that relationship conflict will be positively related to cognitive performance to the extent that group members share negative affect (as detrimental effects of relationship conflict will be mitigated through conflict avoidance). In addition to Study 1, we hypothesize relationship conflict to be negatively related to cognitive performance to the extent that group members share positive affect (as detrimental effects of relationship conflict will be facilitated through openness to conflict).

Study 2

Method

Respondents. A total of 210 employees (M_{age} = 31.4, *SD* = 12.70, 41% male, $M_{\text{job tenure in current organization}}$ = 5.77 year, *SD* = 8.41) of 70 work groups ($M_{\text{working period in current team}}$ = 2.44 year, *SD* = 2.59) participated in this study. Participation was restricted to work groups that consisted of three or more members, and that had at least three members willing to fill out the questionnaire. Nine out of the 79 work groups we approached were not able to participate in the study due to limited time at that moment (work group response rate 87%). Work groups were derived from both the profit (51% commercially orientated service-organizations, such as the catering industry and retail business), and the non-profit sector (49% public enterprises, such as sports federations and universities). We obtained a diverse sample of organizations to enhance the generalizability of our results.

Procedure. Work groups were approached at work and asked to participate in a study about organizational life. Participation was voluntary and anonymity was ensured. Work group members who agreed to participate were asked to reflect on their thoughts and feelings in relation to their *current* work and *current* group members. Respondents filled out the questionnaire individually and returned it to the research assistant upon completion. Because people were approached at work and had to fill out the questionnaire on the spot, we kept the survey short and to the point.

Measures. *Relationship conflict.* Interpersonal conflicts among group members were assessed using three items of Jehn's (1995) scale on intragroup conflict. Sample items of relationship conflict are 'To what extent is there friction among members in your work group?', and 'To what extent are personality conflicts evident in your work group?' Respondents were asked to indicate ongoing relationship conflict in their current work group on a 7-point scale with anchors of 1 (*to a small extent*) to 7 (*to a great extent*). Cronbach's α was .90.

Affect. We shortened our measure of affect and used four items to measure both positive and negative affect. *Positive affect* items included: 'I feel happy' and 'I feel cheerful' (Cronbach's α = .79). *Negative affect* items included: 'I feel sad' and 'I feel nervous' (Cronbach's α = .66). For each item, the respondent was asked to indicate how he or she generally felt at work, on a 7-point scale from 1 (*completely disagree*) to 7 (*completely agree*).

Affective sharing. Sharing of affect with other group members was assessed with a shortened version of the affective sharing scale of Klep et al. (in press) that we also used in

Study 1. Examples are: 'I share my feelings with these group members' and 'My experienced affect is highly similar to the experienced affect of my group members'. Responses to this five item scale were assessed on a 7-point scale (1 = *completely disagree*, 7 = *completely agree*, Cronbach's α = .81).

Perceived cognitive performance. Group members' self perceptions of ongoing cognitive performance within the current work group were measured using three items, including 'I usually try to tackle problems at work through logical thinking' and 'I am good at tasks which require analytical and reasoning skills'. Responses were given on a 7-point scale (1 = *completely disagree*, 7 = *completely agree*; Cronbach's α = .75).

Results

Treatment of the data. We performed a principal-components analysis (PCA) with OBLIMIN rotation on the items comprising all variables of Study 2 (relationship conflict, positive affect, negative affect, affective sharing, and perceived cognitive performance). This analysis yielded the expected five-factor solution. All items loaded between |.48| and |.93| on the intended factor, and all cross-loadings were below |.27|. The eigenvalues of the five factors were greater than one, explaining a total of 65.22% of the variance.

All variables were measured at the individual level of analysis. To examine the justification for aggregating individual responses to the group level we calculated r_{wg} values (James, Demaree, & Wolf, 1984). R_{wg} measures were .73 for relationship conflict, .85 for positive affect, .84 for negative affect, .76 for affective sharing, and .65 for perceived cognitive performance. These values are all well above the suggested .70 cut-off value for aggregating ratings from the individual level to the group level (James et al., 1984), except for perceived cognitive performance which barely misses to meet this criterion, and therefore overall the indices indicate satisfactory agreement. Also note that due to the relatively low level of agreement within work groups for perceived cognitive performance, this provides an even more stringent test of our hypotheses.

Means, standard deviations, Cronbach's alphas, and intercorrelations of the scales for the aggregated scores are depicted in Table 4.1. Note that relationship conflict within work groups is positively associated with negative affect (r = .38, p < .01), and negatively associated with positive affect (r = -.25, p < .05; e.g., Jehn, 1995).

Table 4.1. Means, Standard Deviations, and Intercorrelations between all Group Level Variables for Study 2

Variable	*M*	*SD*	1.	2.	3.	4.	5.
1. Relationship Conflict	2.35	0.83	(.92)				
2. Positive Affect	5.54	0.61	-.25*	(.81)			
3. Negative Affect	2.07	0.71	.38**	-.44**	(.72)		
4. Affective Sharing	4.71	0.69	-.21	.45**	-.12	(.84)	
5. Perceived Cognitive Performance	4.64	0.59	.09	-.08	-.01	.07	(.67)

Note. $N = 70$ (listwise). Internal consistency reliabilities are in parentheses along the diagonal.
* $p < .05$. ** $p < .01$. (two-tailed).

Relationship Conflict and Cognitive Performance

Similar to Study 1, we predict a three-way interaction, such that relationship conflict will be positively related to self-perceptions of cognitive performance to the extent that group members share negative affect. We conducted hierarchical regression analysis[1] in which we used standardized values of the variables. Perceived cognitive performance was the dependent variable and the three main effect terms (relationship conflict, negative affect, affective sharing), the three two-way interaction terms, and the three-way interaction term were entered into the equation as predictors. Table 4.2 shows the regression results. We obtained an interaction between relationship conflict and negative affect ($\beta = .38$, $p < .05$), indicating that negative affect was (marginally) positively related to cognitive performance when relationship conflict was high (1 SD above the mean, $\beta = .31$, $p = .088$), but was not related to cognitive performance when relationship conflict was low (1 SD below the mean, $\beta = -.22$, *ns*). More importantly, as we expected, the three-way interaction was statistically significant ($\beta = .40$, $p < .05$). To examine the nature of this interaction, we conducted simple slopes analyses following the Aiken and West (1991) procedure. Figure 4.2 shows that when relationship conflict was high (1 SD above the mean) and affective sharing was high (1 SD above the mean), negative affect was positively associated with cognitive performance ($\beta = .61$, $p < .05$). Moreover, negative affect was unrelated to cognitive performance when

[1] For all analyses adding the control variables gender (1 = male, 2 = female), age (in years), type of organization (1 = non-profit, 2 = profit), job tenure in the current organization (in years), and working period in the current team (in years) into the equation did not yield significant effects on our dependent variable. Also, entering the control variables into the equation yielded a similar pattern of results.

(1) relationship conflict was low and affective sharing was low (β = -.28, *ns*), (2) relationship conflict was low and affective sharing was high (β = -.16, *ns*), and (3) relationship conflict was high and affective sharing was low (β = .01, *ns*). Thus, the results clearly corroborate the idea that relationship conflict is positively related to perceived cognitive performance to the extent that group members share negative affect.

Table 4.2. Results of Hierarchical Regression Analysis for Perceived Cognitive Performance for Study 2

Predictor	β	ΔR^2	t
Relationship Conflict	.09	.01	.62
Negative Affect	.05	.00	.32
Affective Sharing	-.04	.00	-.28
Relationship Conflict × Negative Affect	.38	.03	2.23*
Relationship Conflict × Affective Sharing	-.06	.03	-.33
Negative Affect × Affective Sharing	.28	.00	1.43
Relationship Conflict × Negative Affect × Affective Sharing	.40	.07	2.03*

Note. N = 70 (listwise). ΔR^2 is the variance explained by each predictor after the other predictors have been entered into the equation.
* $p < .05$. (two-tailed).

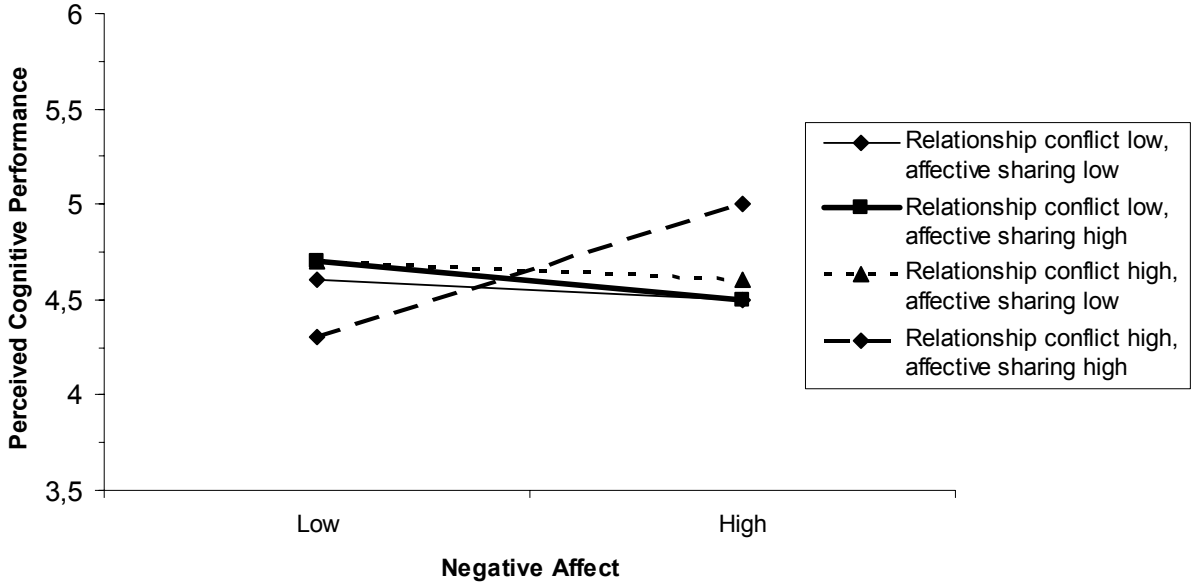

Figure 4.2. Effects of three-way interaction of relationship conflict by negative affect by affective sharing on perceived cognitive performance for Study 2.

In addition to Study 1, we predict a three-way interaction, such that relationship conflict will be negatively related to self-perceptions of cognitive performance to the extent that group members share positive affect. We conducted hierarchical regression analysis[2] in which we used standardized values of the variables. Perceived cognitive performance was the dependent variable and the three main effect terms (relationship conflict, positive affect, and affective sharing), the three two-way interaction terms, and the three-way interaction term were entered into the equation as predictors. Table 4.3 shows the regression results. We did not find any significant main effects or two-way interactions. However, consistent with our expectation, we did find that the three-way interaction was statistically significant (β = -.48, p < .05). To examine the nature of this interaction, we conducted simple slopes analyses (Aiken & West, 1991). Figure 4.3 shows that when relationship conflict was high (1 SD above the mean) and affective sharing was high (1 SD above the mean), positive affect was negatively associated with cognitive performance (β = -.54, p < .05).

Table 4.3. Results of Hierarchical Regression Analysis for Perceived Cognitive Performance for Study 2

Predictor	β	ΔR^2	t
Relationship Conflict	.17	.02	1.33
Positive Affect	-.26	.05	-1.83
Affective Sharing	.05	.00	0.39
Relationship Conflict × Positive Affect	-.20	.02	-1.08
Relationship Conflict × Affective Sharing	.12	.01	0.73
Positive Affect × Affective Sharing	.02	.00	0.10
Relationship Conflict × Positive Affect × Affective Sharing	-.48	.09	-2.54*

Note. N = 70 (listwise). ΔR^2 is the variance explained by each predictor after the other predictors have been entered into the equation.
p < .05. (two-tailed).

[2] For all analyses adding the control variables gender (1 = male, 2 = female), age (in years), type of organization (1 = non-profit, 2 = profit), job tenure in the current organization (in years), and working period in the current team (in years) into the equation did not yield significant effects on our dependent variable. Also, entering the control variables into the equation yielded a similar pattern of results.

Moreover, positive affect was unrelated to cognitive performance when (1) relationship conflict was low and affective sharing was low (β = -.27, *ns*), (2) relationship conflict was low and affective sharing was high (β = .06, *ns*), and (3) relationship conflict was high and affective sharing was low (β = -.27, *ns*). Thus, the results clearly corroborate the idea that relationship conflict is negatively related to perceived cognitive performance to the extent that group members share positive affect.

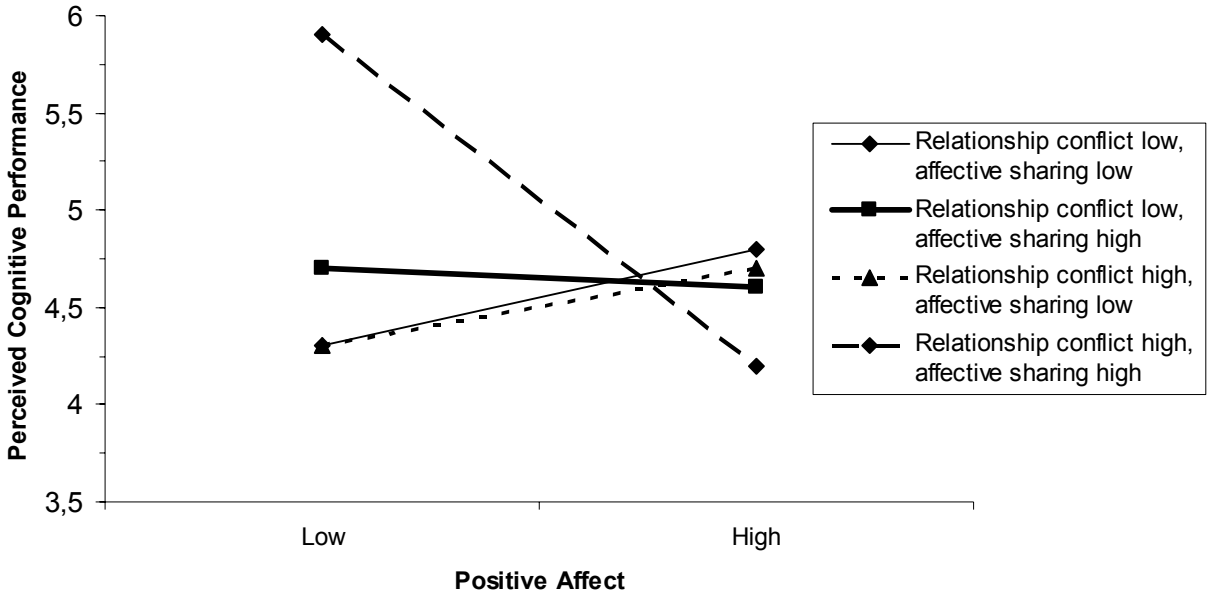

Figure 4.3. Effects of three-way interaction of relationship conflict by positive affect by affective sharing on perceived cognitive performance for Study 2.

General Discussion

Conflict is everywhere and has a pervasive influence on work group functioning. Despite the fact that conflict has a bad reputation, conflict may be potentially constructive to teamwork and organizational effectiveness (Tjosvold, 2008) under very specific circumstances (De Dreu, 2008; De Dreu & Weingart, 2003). Therefore, it is of crucial importance to identify those circumstances that may bring out the constructive potential of conflict. Our findings provide first empirical evidence that task conflict has more beneficial effects on cognitive performance when group members share positive affect as compared to negative affect. These results align well with the earlier suggestion that positive emotions may accentuate and negative emotions may weaken the potential positive effects of task conflict (Jehn & Bendersky, 2003). Moreover, the current study shows that relationship

conflict has less detrimental effects on cognitive performance when group members share negative affect as compared to positive affect. These findings qualify theoretical analyses stating that relationship conflict has negative effects on group processes and outcomes (e.g., Pelled, 1996), as these detrimental effects were found to be alleviated in the specific circumstance that group members shared negative feelings. Furthermore, these findings add to the limited empirical studies that have revealed a positive association between relationship conflict and performance (for a review see De Dreu & Weingart, 2003) and illustrate the potentially important role of affective sharing in conflict situations. The finding that positive and negative affective sharing between group members may bring out potential beneficial effects and/or may mitigate harmful effects of intragroup conflict on performance is a step forward in uncovering conflicts' constructive potential.

Theoretical Implications

Our study adds to conflict literature by acknowledging the often neglected role of *affective* processes in conflict situations. For instance, only a couple of studies have examined affect as a consequence of conflict, thereby emphasizing conflict to elicit negative affective states, such as anger, frustration, strain, uneasiness, anxiety, and annoyance (Jehn, 1995, 1997). Also, few studies have investigated affect as a mechanism underlying the effects of conflict on performance. These studies have focused on negative affect in groups mediating the negative relationship between conflict and group behavior (Greer & Jehn, 2007; Varela, Burke, & Landis, 2008). However, only scant studies focused on affect as a *moderator* variable. In these cases the emphasis has been on the dysfunctional effects of conflict on team behavior, which were found under the conditions of low emotional intelligence (Ayoko et al., 2008) and high negative emotionality (Jehn, 1997).

The current study extends these earlier studies in several ways. First, instead of approaching affect as a negative side effect or fallout of conflict, we build on group affect theory (e.g., Barsade, 2002), and approach affect as an affective context variable in which conflict may (or may not) occur. As work groups often reach a group affective state by engaging in affective sharing mechanisms, it is of importance to examine the influence of these positive or negative shared feelings on perceptions and behaviors towards conflict.

Second, prior research mainly focused on the role of negative affect in conflict situations, and largely ignored the role of positive affect in conflict. The present study shows, however, that positive affective sharing may bring out potential positive effects of task conflict (Study 1), but was also found to amplify the negative effects of relationship conflict (Study 2). As such, these findings specify the general notion that positive affect 'smoothes over conflict behavior' (Jehn & Bendersky, 2003, p. 221), as its beneficial effects were found

to depend on the specific conflict situation at hand. Interestingly, it seems that when relationship conflict occurs positive affect in work groups may in fact be detrimental to (perceived) cognitive performance.

Third, in contrast to earlier empirical findings and theoretical analyses stating negative affect to increase the potential negative influence of all types of conflict (Jehn & Bendersky, 2003), we revealed that negative affect may have positive effects depending on the specific conflict situation. More specifically, we found negative affective sharing to mitigate the negative effects of relationship conflict, which is beneficial for work group functioning. These findings align well with earlier findings showing that negative interactively shared affect in work groups positively affects analytical task performance and group dynamical aspects, such as feelings of belongingness and information sharing (Klep et al., in press). Importantly, this leads us to concur with recent research that has pointed out that negative moods in the work place should not be viewed as being detrimental to work group functioning per se (George & Zhou, 2002, 2007).

Last, the majority of studies that differentiate between task conflict and relationship conflict have abundantly used correlational surveys. Whereas research on conflict in decision-making groups, such as studies on social conflict (e.g., De Dreu & Nijstad, 2008), minority dissent (e.g., De Dreu & West, 2001), and the devil's advocate (e.g., Schulz-Hardt, Jochims, & Frey, 2002) have manipulated conflict in a laboratory setting, laboratory studies on the distinction between task conflict and relationship conflict hardly exist (e.g., Katz, 1977, for an exception). We manipulated both types of conflict in Study 1, and as such, we cater the need for using alternative methods to assess task and relationship conflict, which has been suggested to benefit our understanding of the conflict-performance relationship (De Dreu & Weingart, 2003).

Strengths and Limitations

As every study, the present study has its strengths and limitations. We employed both an experimental study and an organizational survey so that the strengths of the one method may compensate for the weaknesses of the other (Dipboye, 1990). First, weaknesses of Study 1 concern the fact that our experimental set-up led participants to believe that they were interacting in a work group without actually seeing their group members. Even though, several studies have shown that both affective sharing (Peters & Kashima, 2007) and conflict (e.g., Carnevale & Probst, 1998) may well be manipulated without face-to-face interaction, the first study might be criticized for its artificial nature, thereby posing problems for the ecological validity. However, the concerns in Study 1 pose less of a threat to the overall conclusions of the study because we added a field study to our

research. A correlational survey allowed us to study real work groups from a wide range of organizations, in which group members may interact and experience conflict on a daily basis, thereby increasing generalizability and enhancing external validity.

Based upon several literatures, we reasoned that the sharing of positive affect may render group members particularly open to conflict, while the sharing of negative affect may instead increase conflict avoidance tendencies. As a consequence, we hypothesized that potential beneficial and/or detrimental effects of task and relationship conflict may reveal themselves. Although there is previous theoretical and empirical work that strongly supports the rationale of our findings, we can not draw any final conclusions about the validity of our argument, because in the current study we did not empirically test whether conflict norms and conflict strategies played a leading role. Future research may focus on this issue.

Practical Implications

In the light of the present findings managers, team leaders and directors may benefit from being aware of the affective context in which work groups may (or may not) find themselves to be able to optimize employees' (perceived) cognitive performance in different conflict situations. As the current study shows, team leaders may consider promoting the *sharing* of positive and negative affect between group members (in contrast to non-sharing of affect), as it may bring out the constructive potential (and/or may alleviate the harmful effects) of conflict depending on the type of conflict situation. For instance, managers of teams that regularly experience interpersonal incompatibilities face the challenge to teach their employees to share negative experiences and related feelings with other team members, such that detrimental effects of relationship conflict may be alleviated. In contrast, managers of teams that often face *task* related conflicts should anticipate by stimulating the sharing of positive affect between team members in order to put the potential beneficial effects of task conflict to the fore.

Different strategies may be used to promote affective sharing among team members. For example, training programs, which are widely practiced in organizations and are generally aimed at optimizing work group effectiveness, may be tailored to allow more affective sharing between group members. Indeed, sessions may be developed where team members socially share their affect with others, by telling personal stories to one another or having team members experience certain work related events and exchange how they felt. Note that managers may also try to influence the *valence* of the experienced affect within teams in organizations, for instance via work conditions, emotion norms, and leader behavior (for a review see Weiss & Cropanzano, 1996).

Conclusion

In the present study we answer to the call of researchers who argued for the need to connect both research on affect and conflict to enhance the understanding of the role of affect in conflict situations (Nair, 2007). The results of our field study and experimental study support our hypotheses that positive and negative affective sharing were moderators of the link between task and relationship conflict on the one hand and cognitive performance on the other hand. We hope that this study spurs on other researchers to further explore specific conditions that may bring out conflicts' constructive potential, and advances our understanding of the role of affect in harvesting potential benefits of conflict and preventing conflict to hurt too much.